AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of transmitting physical channels, a downlink data transmits from a base station to at least a mobile station, the method comprising:

determining a non-orthogonality among each downlink physical channel;

differently deciding each transmission starting point of the each physical channel from the base station, if the non-orthogonality is determined to exist among the physical channels; and

transmitting the downlink data through the each physical channel having a different transmission starting point from the base station.

2. (Canceled)

3. (Currently Amended) A method of transmitting physical channels, comprising:

determining a non-orthogonality among each downlink physical channel ~~transmitted during a same time~~ through a same frequency bandwidth;

differently deciding each transmission starting point of the each physical channel from a base station, if the non-orthogonality is determined to exist among the downlink physical channels; and

transmitting the downlink data through the each physical channel having the differently decided transmission starting ~~point~~ points.

4. (Previously Presented) The method of claim 1, comprising:

differently deciding, at a transmitter of the base station, chip transmission starting points of a plurality of physical channels using different scrambling codes with one another; and

transmitting the downlink data through the physical channels at the differently decided chip transmission starting points.

5. (Previously Presented) The method of claim 4, wherein a time delay of the each transmission starting point decided differently with one another is determined by a value minimizing mutual interference to the plurality of physical channels scrambled with different scrambling codes.

6. (Previously Presented) The method of claim 5, wherein a time delay of the each chip transmission starting point minimizing mutual interference to the plurality of physical

channels is a value equaling a power strength of the each downlink data transmitted through the physical channel.

7. (Previously Presented) The method of claim 4, wherein the time delay of the each chip transmission starting points differently decided with one another is determined to be shorter than a chip duration.

8. (Previously Presented) The method of claim 7, wherein the chip duration is a reciprocal number of chip rate.

9. (Previously Presented) The method of claim 4, when the transmitter of the base station transmits the downlink data through a first physical channel using a scrambling code and a second physical channel using another scrambling code, each chip transmission starting point of the first and second physical channels have a time interval corresponding to a half of the chip duration.

10. (Previously Presented) The method of claim 4, wherein a time delay of the each chip transmission starting points differently decided with one another is determined by a reciprocal number value of the number of the physical channels scrambled with different scrambling codes.

11. (Currently Amended) A method of transmitting physical channels, which transmit chip signals through physical channels,

wherein a first group of physical channels maintaining orthogonality due to the Walsh function using a same quasi-orthogonal function (QOF) having equivalent chip transmission starting points from a base station, while a second group of physical channels not maintaining orthogonality due to use of a different quasi-orthogonal function (QOF) have different chip transmission starting points from the base station, wherein each of the physical channels of the second group has a different starting point.

12. (Previously Presented) The method of claim 11, wherein a mobile station receiving the chip signal synchronizes to receipt time of the first physical channel using one quasi-orthogonal function (QOF) from the physical channels using the different quasi-orthogonal function (QOF), and synchronizes to receipt time of the other physical channels, excluding the first physical channel, using a difference of the chip transmission starting points among the physical channels which is already known in the mobile station.

13. (Currently Amended) A method of transmitting data on downlink physical channels, from a base station to at least a mobile station, wherein the physical channels are distinguished from one another by specific codes, the method comprising:

examining whether the specific codes are orthogonal with one another;

determining starting times of transmitting data on the downlink physical channels, when the specific codes of the physical channels are non-orthogonal with one another, wherein the starting time of one physical channel from the base station is different from the starting time of another physical channel from the base station; and

transmitting the data on the downlink physical channels at the determined starting times.

14. (Previously Presented) The method of claim 13, wherein the physical channels are transmitted with same frequency bandwidth.

15. (Previously Presented) The method of claim 13, wherein the specific codes are scrambling codes, and the starting time of transmission is the starting point of chip transmission.

16. (Previously Presented) The method of claim 15, wherein a time interval between chip transmission starting points is a value minimizing mutual interference between the physical channels.

17. (Previously Presented) The method of claim 15, wherein a time interval of the each chip transmission starting points is shorter than a chip duration.

18. (Previously Presented) The method of claim 17, wherein the time interval corresponds to a half of the chip duration.

19. (Previously Presented) The method of claim 15, wherein a time interval is determined by a reciprocal of the number of the physical channels scrambled with different scrambling codes.

20. (Currently Amended) A method of transmitting data on downlink physical channels, from a base station to at least a ~~motile~~ mobile station, wherein the physical channels are distinguished from one another by quasi-orthogonal functions, the method comprising:

examining indices of the quasi-orthogonal functions for each physical channel;

determining starting times of transmitting data on the downlink physical channels, when indices indicate that the quasi-orthogonal functions are non-orthogonal with one another, wherein the starting time of one physical channel from the base station is different from the starting time of another physical channel from the base station; and

transmitting the data on the downlink physical channels at the determined starting times.

21. (Previously Presented) The method of claim 20, wherein the starting time of transmission is the starting point of chip transmission.

22. (Previously Presented) The method of claim 20, wherein transmitting the data synchronized with time intervals between chip transmission starting points.

23. (Currently Amended) A method of transmitting data on physical channels using at least one scrambling code in a base station, comprising:

scrambling and transmitting first data on a first physical channel from the base station by a first scrambling code;

scrambling and transmitting second data on a second physical channel from a base station by a second scrambling code; and

wherein a chip synchronization on the first physical channel and on the second physical channel is not made.

24. (Previously Presented) The method of claim 23, wherein the primary scrambling code and the secondary scrambling code have non-orthogonality with each other.

25. (Previously Presented) The method of claim 23, wherein a transmission offset between the physical channels is determined based on a number of the scrambling codes.

26. (Previously Presented) The method of claim 23, wherein a time interval between data transmission starting points is a value minimizing mutual interference between the physical channels.

27. (Previously Presented) The method of claim 23, wherein a time interval of data transmission starting points is shorter than a chip duration.